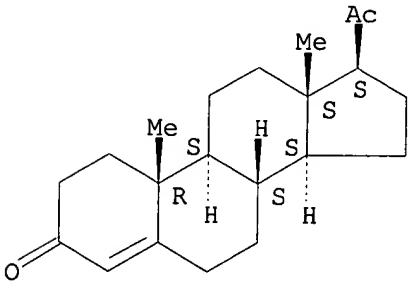
L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2000 ACS
RN 57-83-0 REGISTRY
CN Pregn-4-ene-3,20-dione (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Progesterone (8CI)**
OTHER NAMES:
CN .DELTA.4-Pregnene-3,20-dione
CN Agolutin
CN Bio-luton
CN Corlutin
CN Corlutina
CN Corluvite
CN Corporin
CN Corpus luteum hormone
CN Crinone
CN Flavolutan
CN Fologenon
CN Gesterol
CN Gestone
CN Gestormone
CN Gestron
CN Glanducorpin
CN Gynlutin
CN Gynolutone
CN Hormoflaveine
CN Hormoluton
CN Lipo-Lutin
CN Lucorteum Sol
CN Lugesteron
CN Luteal Hormone
CN Luteinique
CN Luteocrin normale
CN Luteodyn
CN Luteogan
CN Luteohormone
CN Luteol
CN Luteopur
CN Luteosan
CN Luteostab
CN Luteovis
CN Luteum
CN Lutex
CN Lutidon
CN Lutin
CN Lutociclina
CN Lutocyclin
CN Lutocyclin M
CN Lutocylin
CN Lutoform
CN Lutogyl
CN Lutren
CN Lutromone
CN Nalutron
CN Percutacrine Luteinique
CN Piaponon
CN Primolut
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
FS STEREOSEARCH

S14/171

DR 8012-32-6, 8023-13-0, 257630-50-5
MF C21 H30 O2
CI COM
LC STN Files: ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSDIRECTORY, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PIRA, PROMT, RTECS*, SPECINFO, TOXLINE, TOXLIT, ULIDAT, USAN, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

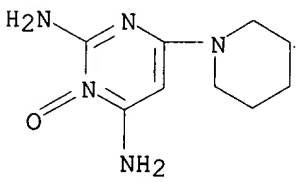
Absolute stereochemistry.



514/171

35490 REFERENCES IN FILE CA (1967 TO DATE)
390 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
35513 REFERENCES IN FILE CAPLUS (1967 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2000 ACS
RN 38304-91-5 REGISTRY
CN 2,4-Pyrimidinediamine, 6-(1-piperidinyl)-, 3-oxide (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2,4-Diamino-6-piperidinopyrimidine 3-N-oxide
CN 2,4-Diamino-6-piperidinopyrimidine 3-oxide
CN Loniten
CN **Minoxidil**
AR 16317-69-4
FS 3D CONCORD
MF C9 H15 N5 O
CI COM
LC STN Files: AGRICOLA, AIDSLINE, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU,
DRUGUPDATES, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*,
NIOSHTIC, PHAR, PIRA, PROMT, RTECS*, SPECINFO, TOXLINE, TOXLIT, USAN,
USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



514/ 255.05
255.06

723 REFERENCES IN FILE CA (1967 TO DATE)
30 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
724 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L3 ANSWER 2 OF 4 USPATFULL

CLM What is claimed is:

1. An alcoholic or aqueous alcoholic topical composition for the transdermal delivery of a hormonally active drug which comprises, on a weight basis, of the total composition: from about 0.1 to about 10% of hormonally active drug; from about 2 to 20% of skin **penetration enhancer** comprising C.sub.7 to C.sub.14 -hydrocarbyl substituted 1,3-dioxolane, 1,3-dioxane or acetal, wherein the hydrocarbyl group substituent has from about 7 to 10 carbon atoms; 0 to about 25% 1,2-propylene glycol; from about 35 to 75% ethanol, isopropanol or mixture thereof; 0 to about 35% water; and, 0 to about 4% of cellulosic thickener.

2. The topical composition according to claim 1 which comprises on a weight basis: from about 1 to about 6% of hormonally active drug; from about 2 to 15% of said enhancer; 5 to about 22% 1,2-propylene glycol; from about 40 to 75% ethanol, isopropanol or mixture thereof; 0 to about 25% water; and, 0 to about 3% of cellulosic thickener.

3. The topical composition according to claim 1 which comprises, on a weight basis: from about 1.0 to about 4% of hormonally active drug; from about 5 to 10% of said enhancer; 5 to about 20% 1,2-propylene glycol; from about 50 to 75% ethanol, isopropanol or mixture thereof; 0 to about 25% water; and, 0 to about 2% of cellulosic thickener.

4. The topical composition according to claim 1 wherein the hormonally active drug is an estrogen, progesterone or androgen or mixture thereof.

5. The topical composition according to claim 4 wherein the hormonally active drug comprises testosterone.

6. The topical composition according to claim 4 wherein the hormonally active drug comprises an estradiol.

7. The topical composition according to claim 4 wherein the hormonally active drug comprises progesterone.

8. A method for the transdermal administration of hormonally active drug to a patient in need thereof which comprises topically applying to the skin of the patient an alcoholic or aqueous alcoholic composition comprising a therapeutically effective amount of hormonally active drug in a vehicle comprising a lower alcohol selected from the group consisting of ethanol, isopropanol and mixture thereof, 1,2-alkyl diol having from 3 to 6 carbon atoms, and water in a mixing ratio of alcohol:glycol:water of 50-80:5-20:5-40, said vehicle comprising from about 70 to 90 weight percent of the composition, and from about 5 to about 20 weight percent of a skin penetration enhancing compound selected from the group consisting of 2-hydrocarbyl-1,3-dioxolane, 2-hydrocarbyl-1,3-dioxane and hydrocarbyl substituted-acetal, wherein the hydrocarbyl group has from 7 to 14 carbon atoms.

9. The method for the transdermal administration of hormonally active drug according to claim 8 wherein the drug is selected from the group consisting of testosterone, progesterone and estradiol.

10. The topical composition according to claim 5 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and about 10% by weight of 2-n-nonyl-1,3-dioxolane.

11. The topical composition according to claim 6 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and from about 5 to about 10% by weight of 2-n-nonyl-1,3-dioxolane.

12. The topical composition according to claim 11 comprising about 10 percent by weight of 2-n-nonyl-1,3-dioxolane.

13. The topical composition according to claim 7 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and from about 5 to about 10% by weight of 2-n-nonyl-1,3-dioxolane.

14. The topical composition according to claim 13 comprising about 10 percent by weight of 2-n-nonyl-1,3-dioxolane.

15. The method according to claim 8 wherein the hormonally active drug is testosterone.

16. The method according to claim 8 wherein the hormonally active drug is estradiol.

17. The method according to claim 8 wherein the hormonally active drug is progesterone.

DRWD FIG. 1 is a ternary phase diagram showing the miscibility of 2-n-nonyl-1,3-dioxolane skin **penetration enhancer** in an **ethanol-propylene glycol**-water vehicle;

DETD . . . example compares the percutaneous absorption of progesterone through human skin from 1% or 2% gel formulations with and without skin **penetration enhancer** (2-n-nonyl-1,3-dioxolane,2-NND) in the aqueous alcoholic gel formulation using **ethanol**: **propylene glycol**:water vehicle at a 70:20:10 or 70:10:20 weight mixing ratio. The compositions used in these tests are shown in the following. . .

. . . the total composition: from about 0.1 to about 10% of hormonally active drug; from about 2 to 20% of skin **penetration enhancer** comprising C.sub.7 to C.sub.14 -hydrocarbyl substituted 1,3-dioxolane, 1,3-dioxane or acetal, wherein the hydrocarbyl group substituent has from about 7 to. . .

10. The topical composition according to claim 5 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and about 10% by weight of 2-n-nonyl-1,3-dioxolane.

11. The topical composition according to claim 6 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and from about 5 to about 10% by weight of 2-n-nonyl-1,3-dioxolane.

13. The topical composition according to claim 7 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and from about 5 to about 10% by weight of 2-n-nonyl-1,3-dioxolane.

L3 ANSWER 2 OF 4 USPATFULL

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2. The topical composition according to claim 1 which comprises on a weight basis: from about 1 to about 6% of hormonally active drug; from about 2 to 15% of said enhancer; 5 to about 22% 1,2-propylene glycol; from about 40 to 75% ethanol, isopropanol or mixture thereof; 0 to about 25% water; and, 0 to about 3% of cellulosic thickener.

3. The topical composition according to claim 1 which comprises, on a weight basis: from about 1.0 to about 4% of hormonally active drug; from about 5 to 10% of said enhancer; 5 to about 20% 1,2-propylene glycol; from about 50 to 75% ethanol, isopropanol or mixture thereof; 0 to about 25% water; and, 0 to about 2% of cellulosic thickener.

4. The topical composition according to claim 1 wherein the hormonally active drug is an estrogen, progesterone or androgen or mixture thereof.

5. The topical composition according to claim 4 wherein the hormonally active drug comprises testosterone.

6. The topical composition according to claim 4 wherein the hormonally active drug comprises an estradiol.

7. The topical composition according to claim 4 wherein the hormonally active drug comprises progesterone.

8. A method for the transdermal administration of hormonally active drug to a patient in need thereof which comprises topically applying to the skin of the patient an alcoholic or aqueous alcoholic composition comprising a therapeutically effective amount of hormonally active drug in a vehicle comprising a lower alcohol selected from the group consisting of ethanol, isopropanol and mixture thereof, 1,2-alkyl diol having from 3 to 6 carbon atoms, and water in a mixing ratio of alcohol:glycol:water of 50-80:5-20:5-40, said vehicle comprising from about 70 to 90 weight percent of the composition, and from about 5 to about 20 weight percent of a skin penetration enhancing compound selected from the group consisting of 2-hydrocarbyl-1,3-dioxolane, 2-hydrocarbyl-1,3-dioxane and hydrocarbyl substituted-acetal, wherein the hydrocarbyl group has from 7 to 14 carbon atoms.

9. The method for the transdermal administration of hormonally active drug according to claim 8 wherein the drug is selected from the group consisting of testosterone, progesterone and estradiol.

10. The topical composition according to claim 5 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and about 10% by weight of 2-n-nonyl-1,3-dioxolane.

11. The topical composition according to claim 6 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and from about 5 to about 10% by weight of 2-n-nonyl-1,3-dioxolane.

12. The topical composition according to claim 11 comprising about 10 percent by weight of 2-n-nonyl-1,3-dioxolane.

13. The topical composition according to claim 7 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and from about 5 to about 10% by weight of 2-n-nonyl-1,3-dioxolane.

14. The topical composition according to claim 13 comprising about 10 percent by weight of 2-n-nonyl-1,3-dioxolane.

15. The method according to claim 8 wherein the hormonally active drug is testosterone.

16. The method according to claim 8 wherein the hormonally active drug is estradiol.

17. The method according to claim 8 wherein the hormonally active drug is progesterone.

DRWD FIG. 1 is a ternary phase diagram showing the miscibility of 2-n-nonyl-1,3-dioxolane skin **penetration enhancer** in an **ethanol-propylene glycol**-water vehicle;

DETD . . . example compares the percutaneous absorption of progesterone through human skin from 1% or 2% gel formulations with and without skin **penetration enhancer** (2-n-nonyl-1,3-dioxolane,2-NND) in the aqueous alcoholic gel formulation using **ethanol**: **propylene glycol**:water vehicle at a 70:20:10 or 70:10:20 weight mixing ratio. The compositions used in these tests are shown in the following. . .

. . . the total composition: from about 0.1 to about 10% of hormonally active drug; from about 2 to 20% of skin **penetration enhancer** comprising C.sub.7 to C.sub.14 -hydrocarbyl substituted 1,3-dioxolane, 1,3-dioxane or acetal, wherein the hydrocarbyl group substituent has from about 7 to. . .

10. The topical composition according to claim 5 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and about 10% by weight of 2-n-nonyl-1,3-dioxolane.

11. The topical composition according to claim 6 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and from about 5 to about 10% by weight of 2-n-nonyl-1,3-dioxolane.

13. The topical composition according to claim 7 comprising an **ethanol/propylene glycol**/water carrier system at a weight ratio of 70:10-20:20-10; and from about 5 to about 10% by weight of 2-n-nonyl-1,3-dioxolane.

PI US 5968919 19991019

TI Hormone replacement therapy drug formulations for topical application to the skin|

L12 ANSWER 30 OF 33 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
AN 89204479 EMBASE
TI Approach to **hair** loss reduction.
CT Medical Descriptors:
***hair loss: DT, drug therapy**
letter
human
topical drug administration
*ethinylestradiol: DT, drug therapy
*minoxidil: DT, drug therapy
***progesterone: DT, drug therapy**
RN (ethinylestradiol) 57-63-6; (minoxidil) **38304-91-5**; (

L12 ANSWER 27 OF 33 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
AN 93099101 EMBASE
AB This article is a useful guide for treating androgen-related skin disorders such as androgenetic **alopecia**, acne, and hirsutism. All available antiandrogens are discussed, as well as treatment doses, efficacy, and mode of action.
CT Medical Descriptors:
*acne: DT, drug therapy
***alopecia: DT, drug therapy**
*hirsutism: DT, drug therapy
female
gynecomastia: SI, side effect
human
libido
male
male type alopecia: DT, drug therapy
phosphorylation
prostate tumor: DT, drug therapy
review
sebum secretion
skin disease: DT, drug therapy
topical drug administration
weight gain
*antiandrogen: PD, pharmacology
*antiandrogen:. . . noretynodrel
minoxidil: CB, drug combination
minoxidil: DT, drug therapy
nilutamide: DT, drug therapy
noretynodrel: DT, drug therapy
oral contraceptive agent: DT, drug therapy
prasterone: EC, endogenous compound
progesterone: CB, drug combination
progesterone: DT, drug therapy
retinoic acid: DT, drug therapy
retinoic acid: CB, drug combination
spironolactone: DT, drug therapy
steroid 5alpha reductase: EC, endogenous compound
testosterone: EC,. . .
RN. . . 114-07-8, 70536-18-4; (ethinylestradiol plus etynodiol diacetate) 8075-78-3; (finasteride) 98319-26-7; (flutamide) 13311-84-7; (mestranol plus norethisterone) 8015-29-0; (mestranol plus noretynodrel) 8015-30-3; (minoxidil) **38304-91-5**; (nilutamide) 63612-50-0; (noretynodrel) 68-23-5; (prasterone) 53-43-0; (**progesterone**) **57-83-0**; (retinoic acid) 302-79-4; (spironolactone) 52-01-7; (testosterone)

L12 ANSWER 25 OF 33 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
AN 94166588 EMBASE
CT Medical Descriptors:
*skin . . . report
electrolyte disturbance: SI, side effect
erythema: SI, side effect
female
gynecomastia: SI, side effect
hirsutism: SI, side effect
human
impotence: SI, side effect
libido
lichenoid eruption: SI, side effect
male type alopecia: DT, drug therapy
patch test
rash: SI, side effect
topical drug administration
vasculitis: SI, side effect
*spironolactone: AE, adverse drug reaction
*spironolactone: CB,. . . drug therapy
potassium sparing diuretic agent: AE, adverse drug reaction
potassium sparing diuretic agent: CB, drug combination
potassium sparing diuretic agent: DT, drug therapy
progesterone: AE, adverse drug reaction
progesterone: CB, drug combination
progesterone: DT, drug therapy
RN (spironolactone) 52-01-7; (benzyl nicotinate) 94-44-0; (minoxidil) **38304-91-5**; (**progesterone**) **57-83-0**

L12 ANSWER 23 OF 33 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
AN 95302636 EMBASE
TI [Topical treatments of androgenetic **alopecia**].
TRAITEMENTS TOPIQUES DE L'ALOPECIE ANDROGENETIQUE.
AB Topical treatments of **hair** loss are numerous and often useless in the hands of both trichologists and charlatans. Their tentative classification includes traditional products such as the rubefacients which are credited of promoting the vascularization of the **hair** follicles and of increasing drug absorption, and 'trophic substances 'with an alleged nutritional activity, the antiandrogens, both steroidal and non-steroidal,. . .
CT Medical Descriptors:
***alopecia: DT, drug therapy**
article
human
oral drug administration
topical drug administration
*antiandrogen: DT, drug therapy
*corticosteroid: DT, drug therapy
*minoxidil: DT, drug therapy
*retinoid: DT, drug therapy
amino. . . DT, drug therapy
megestrol: DT, drug therapy
menthol: DT, drug therapy
nicotinic acid ester: DT, drug therapy
pilocarpine: DT, drug therapy
plant extract: DT, drug therapy
progesterone: DT, drug therapy

L12 ANSWER 19 OF 33 MEDLINE
AN 85182137 MEDLINE
TI Medical treatment of male pattern **alopecia** (androgenic **alopecia**).
AB The causes and potential causes of androgenic **alopecia** in men and women are discussed. The scientific attempts at reversing this process are detailed including use of estrogen, thyroid, **progesterone**, and minoxidil. At present, the practical approach for the clinician is to ascertain in females that an androgen overproduction syndrome is not present. A therapeutic trial of topical **progesterone** at a 2%-5% concentration appears to be reasonable when the physician and patient appreciate the limitations of this approach.
CT Check Tags: Animal; Human; Male
***Alopecia: DT, drug therapy**
Alopecia: ME, metabolism
Androgen Antagonists: TU, therapeutic use
*Androgens: ME, metabolism
Hamsters
Minoxidil: TU, therapeutic use
Progesterone: TU, therapeutic use
Vasodilator Agents: TU, therapeutic use
RN **38304-91-5 (Minoxidil); 57-83-0 (Progesterone)**

L12 ANSWER 18 OF 33 MEDLINE
AN 87098867 MEDLINE
AB Little is known about the mechanism of action of minoxidil-induced **hair** growth in male pattern baldness. We studied the potential antiandrogenic effect of topical minoxidil administered at the same dose and. . . 5% minoxidil topically applied for three weeks prevented the androgen-dependent growth of the pigmented spot, the sebaceous gland, or the **hair** follicle diameter induced by subcutaneous Silastic capsules filled with crystalline testosterone. As a positive control in the same experiments, 5% **progesterone** did significantly inhibit pigment and sebaceous gland enlargement. We conclude that there is no antiandrogenic component to the mechanism of. . .
CT Check Tags: Animal; Female; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.
*Androgen Antagonists
Hair: DE, drug effects
Hamsters
Mesocricetus
Minoxidil: AD, administration & dosage
*Minoxidil: PD, pharmacology
Sebaceous Glands: DE, drug effects
Skin. . .
R

L12 ANSWER 17 OF 33 MEDLINE
AN 89220707 MEDLINE
TI **Hair** loss. What causes it and what can be done about it.
AB Although both men and women throughout history have seen **hair** as an important aspect of appearance, it is especially important today, in light of the great emphasis on youthfulness. A. . . certain products now under investigation that have shown an ability to retard or reverse male pattern baldness in certain individuals. **Hair** loss has many possible causes, such as systemic diseases, infections, toxic agents, and hormone imbalances. Treatment of the underlying disorder alleviates the shedding of **hair**. Balding may also be a normal physiologic occurrence in women taking oral contraceptives or after parturition and in men with male pattern baldness. The latter can be treated topically with **progesterone** or minoxidil. Minoxidil has been studied extensively and has been shown to improve balding at the vertex of the scalp, particularly in young men who have only begun to lose **hair**. Cases of more extensive male pattern baldness and baldness secondary to scarring can be treated effectively with surgical procedures.
CT Check Tags: Female; Human; Male
Adult
Age Factors
***Alopecia**
Alopecia: DT, drug therapy
Alopecia: ET, etiology
Alopecia: SU, surgery
Contraceptives, Oral: AE, adverse effects
Hair: GD, growth & development
Hair: TR, transplantation
Middle Age
Minoxidil: TU, therapeutic use
Pregnancy
Sex Factors
Stanolone: PH, physiology
R

L12 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2000 ACS
AN 1993:415110 CAPLUS
DN 119:15110

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5183817	A	19930202	US 1988-283646	19881213

TI Combination of retinoids and minoxidil for **hair** growth
AB A compn. for **hair** growth and treating **alopecia** comprises combination of a retinoid 0.001-2 and minoxidil (I) 0.01-30%. The compn. may also have vitamins, hormones, and antiandrogens. A. . .
ST retinoid minoxidil **hair** growth stimulant
IT Retinoids
RL: PREP (Preparation)
(**hair** growth stimulant prepn. contg. minoxidil and)
IT Estrogens
Hormones
RL: BIOL (Biological study)
(**hair** growth stimulant prepn. contg. minoxidil and retinoids and)
IT **Alopecia**
(treatment of, with **hair** prepn. contg. retinoids and minoxidil)
IT Androgens
RL: BIOL (Biological study)
(antiandrogens, **hair** growth stimulant prepn. contg. minoxidil and retinoids and)
IT **Hair** preparations
(growth stimulants, minoxidil and retinoids in)
IT Steroids, biological studies
RL: PREP (Preparation)
(seco-, **hair** growth stimulant prepn. contg. minoxidil and retinoids and)
IT 116-31-4, Retinal 127-47-9 302-79-4, Vitamin A acid 4159-20-0, Vitamin A2 acid 4759-48-2 5300-03-8 5352-74-9 12739-07-0, .gamma.-Vitamin A acid 13100-69-1 51077-50-0, 7,8-Dihydro retinoic acid 52978-64-0, .alpha.-Vitamin A acid 68070-35-9
RL: BIOL (Biological study)
(**hair** growth stimulant prepn. contg. minoxidil and)
IT 52-01-7, Spironolactone **57-83-0**, Pregn-4-ene-3,20-dione, miscellaneous 67-97-0, Vitamin D3 427-51-0, Cyproterone acetate 13311-84-7, Flutamide 32222-06-3, 1,25-Dihydroxycholecalciferol 41294-56-8, 1-Hydroxycholecalciferol 60965-80-2 89672-11-7 148141-01-9
RL: BIOL (Biological study)
(**hair** growth stimulant prepn. contg. minoxidil and retinoids and)
IT **38304-91-5**, Minoxidil
RL: BIOL (Biological study)

L12 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2000 ACS
AN 1998:149583 CAPLUS
DN 128:248335

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10059829	A2	19980303	JP 1996-232609	19960813

PI JP 10059829 A2 19980303 JP 1996-232609 19960813
TI **Hair** tonics containing encapsulated nutrients in lipids
AB **Hair** tonic prepns. which are stable and safe to use, comprise plant exts. and steroids encapsulated in lipid membranes contg. amino acids, higher fatty acids, and/or higher alcs. The prepns. stimulate the **hair** growth and show moisture-holding effects. Liposomes contg. Humulus lupulus exts. were prepd. with phosphatidylcholines and hydrogenated soya lecithins with addn. of L-proline and L-isoleucine. A **hair** lotion contained the above liposomes 15, ethanol 60, tocopherol acetate 0.5, propylene glycol 2, methylparaben 0.2, and distd. water 22.3. . .
ST **hair** tonic nutrient encapsulation lipid; Humulus ext phosphatidylcholine liposome **hair** tonic
IT Long-chain alcohols
Long-chain fatty acids
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(C14-22; **hair** tonic prepns. contg. encapsulated nutrients in lipid membranes)
IT Arnica montana
Hop (Humulus lupulus)
Matricaria recutita
Mentha arvensis
Peppermint (Mentha piperita)
Rosemary
Sage (Salvia officinalis)
St.-John's-wort (Hypericum erectum)
Thyme (Thymus vulgaris)
(exts.; **hair** tonic prepns. contg. encapsulated nutrients in lipid membranes)
IT **Hair** growth stimulants
Shampoos
(**hair** tonic prepns. contg. encapsulated nutrients in lipid membranes)
IT Amino acids, biological studies
Phosphatidylcholines, biological studies
Phosphatidylethanolamines, biological studies
Phosphatidylinositols
Phosphatidylserines
Sphingomyelins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**hair** tonic prepns. contg. encapsulated nutrients in lipid membranes)
IT Soya lecithins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hydrogenated; **hair** tonic prepns. contg. encapsulated nutrients in lipid membranes)
IT **Hair** conditioners
(rinses; **hair** tonic prepns. contg. encapsulated nutrients in lipid membranes)
IT 50-28-2, Estradiol, biological studies 52-01-7, Spironolactone 53-16-7, Estrone, biological studies 56-41-7, L-Alanine, biological

studies 56-47-3, Deoxycorticosterone acetate 56-87-1, L-Lysine, biological studies 57-10-3, Palmitic acid, biological studies **57-83-0**, **Progesterone**, biological studies 61-90-5, L-Leucine, biological studies 72-19-5, L-Threonine, biological studies 73-32-5, L-Isoleucine, biological studies 112-92-5, Stearyl alcohol 147-85-3, L-Proline, biological studies 427-51-0, Cyproterone acetate 488-10-8, cis-Jasmone 661-19-8, Behenyl alcohol 1173-26-8, Corticosterone acetate 1405-86-3, Glycyrrhizinic acid 2630-39-9, Methyldihydrojasmonate 5739-17-3, Dihydroisojasmone **38304-91-5**, 2,4-Diamino-6-piperidinopyrimidine-3-oxide 39647-11-5 85305-87-9, Glucocerebroside 85305-88-0, Galactocerebroside
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**hair** tonic prepns. contg. encapsulated nutrients in lipid

L12 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2000 ACS
AN 2000:68371 CAPLUS
DN 132:112757

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000003749	A2	20000127	WO 1999-US16100	19990716
	WO 2000003749	A3	20000420		

W: AE, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	US 6124362	A	20000926	US 1999-353408	19990715

TI Method for regulating **hair** growth

AB Disclosed is a method for regulating the growth and loss of **hair** via the use of compns. contg. a compd. selected from the group consisting of lupane triterpenes, derivs. of lupane triterpenes, derivs. of oleanane triterpenes, derivs. of ursane triterpenes, and salts and mixts. thereof. A **hair** tonic soln. contained betulinic acid 5, Tween-20 1, isopropanol 47, propylene glycol 28.2, and di-Me isosorbide 18.8 %.

ST **hair** growth stimulant triterpene; betulinic acid **hair** tonic

IT Androgens
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(antiandrogens; **hair** growth regulating compns. contg. triterpenes and addnl. agents)

IT **Hair** preparations
(growth stimulants; **hair** growth regulating compns. contg. triterpenes and addnl. agents)

IT Saponins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**hair** growth regulating compns. contg. triterpenes and addnl. agents)

IT Drug delivery systems
(injections, s.c.; **hair** growth regulating compns. contg. triterpenes and addnl. agents)

IT Triterpenes
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(lupane; **hair** growth regulating compns. contg. triterpenes and addnl. agents)

IT Triterpenes
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oleanane; **hair** growth regulating compns. contg. triterpenes and addnl. agents)

IT Ion channel openers
(potassium; **hair** growth regulating compns. contg. triterpenes and addnl. agents)

IT Drug delivery systems
(tablets; **hair** growth regulating compns. contg. triterpenes and addnl. agents)

IT Triterpenes

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(ursane; **hair** growth regulating compns. contg. triterpenes and addnl. agents)

IT Carboxylic acids, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(zinc salts; **hair** growth regulating compns. contg. triterpenes and addnl. agents)

IT 57-41-0, Phenytoin **57-83-0**, **Progesterone**, biological studies 77-52-1, Ursolic acid 123-99-9, Azelaic acid, biological studies 364-98-7, Diazoxide 427-51-0, Cyproterone acetate 464-92-6, Asiatic acid 472-15-1, Betulinic acid 508-02-1, Oleanolic acid 4373-41-5, Crataegolic acid 4481-62-3, Betulonic acid 5306-85-4, Dimethyl isosorbide 6893-02-3, Triiodothyronine 34157-83-0, Celastrol **38304-91-5**, Minoxidil 59865-13-3, Cyclosporin 94470-67-4, Cromakalim 98319-23-4
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**hair** growth regulating compns. contg. triterpenes and addnl. agents)

IT 9081-34-9, 5.alpha.-Reductase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; **hair** growth regulating compns. contg.

L12 ANSWER 5 OF 33 USPATFULL
AN 1998:159493 USPATFULL
PI US 5851556 19981222
SUMM . . . one or more salts of one or more alkaline-earth metals can therefore be applied to the face, the neck, the **hair** and the nails, or any other skin area of the human body such as the large skin-folds (axillary regions, submammary. . .
SUMM They can also be used for the **hair** in the form of aqueous, alcoholic or aqueous-alcoholic solutions, or in the form of creams, gels, emulsions, foams or alternatively. . .
SUMM The salt of an alkaline-earth metal can also be incorporated into various compositions for **hair** care, especially shampoos, optionally antiparasitic shampoos, **hair** setting lotions, treatment lotions, **hair**-styling gels or creams, dyeing compositions (especially oxidation dyes) optionally in the form of colouring shampoos, **hair** restructuring lotions, compositions for permanent waving (especially compositions for the first stage of a permanent waving), lotions or gels for preventing **hair** loss, and the like.
SUMM antiseborrheic agents such as **progesterone**;
SUMM agents for combating **hair** loss such as **monoxidil**;
SUMM . . . application of make-up removing creams, gels, sera, lotions or milks or of aftersun compositions to the skin or to dry **hair**, application of a **hair** lotion to wet **hair**, of shampoos, or alternatively application of toothpaste to the gums.

L12 ANSWER 3 OF 33 USPATFULL
AN 1999:150638 USPATFULL
PI US 5989535 19991123
SUMM Steroids (e.g. Testosterone, Estradiol, **Progesterone** and its conjugates)
SUMM **Hair** growth stimulants (e.g. **Monoxidil**, Finasteride, Dexpenthenol, .alpha.-Hydroxy Acids)

L16 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1993:87393 CAPLUS
DOCUMENT NUMBER: 118:87393
TITLE: Cosmetic and pharmaceutical compositions containing Medicago saponins.
INVENTOR(S): Bonte, Frederic; Meybeck, Alain; Massiot, Georges
PATENT ASSIGNEE(S): LVMH Recherche GIE, Fr.
SOURCE: Fr. Demande, 29 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2669225	A1	19920522	FR 1990-14542	19901121
FR 2669225	B1	19931112		
WO 9209262	A1	19920611	WO 1991-FR818	19911018
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
EP 558509	A1	19930908	EP 1991-918406	19911018
EP 558509	B1	19950315		
R: BE, CH, DE, ES, FR, GB, IT, LI				
JP 06502163	T2	19940310	JP 1991-517711	19911018
ES 2059297	T3	19950901	ES 1991-918406	19911018
US 5723149	A	19980303	US 1996-596699	19960205
US 5770223	A	19980623	US 1996-748639	19961113
PRIORITY APPLN. INFO.:			FR 1990-14542	19901121
			WO 1991-FR818	19911018
			US 1993-64126	19930521
			US 1994-326048	19941019
			US 1996-596699	19960205

AB Title compns. contain saponin or sapogenin of Medicago roots or leaves. The compn. helps epidermal renewal, stimulates **hair** growth, and prevents **hair** loss and skin aging. M. sativa roots were pulverized, extd. with MeOH, the ext. concd., pptd. with acetone, and the ppt. rich in saponins was dried. A gel for **hair** loss contained the above ext. 0.3, Carbopol-940 45, Phytantriol 0.1, Zn-protein complex 0.1, preservatives 0.05, and water 100 g.

ST Medicago saponin pharmaceutical cosmetic compn; sapogenin Medicago pharmaceutical cosmetic compn; **hair** growth stimulant Medicago saponin; skin aging prevention Medicago saponin

IT Alfalfa
Medicago
Medicago falcata
Medicago laciniata
Medicago littoralis
Medicago lupulina
Medicago minima
Medicago truncatula
Medicago varia
(saponin and sapogenin of, cosmetic and pharmaceutical compn. contg., for prevention of **hair** loss and skin aging)

IT **Alopecia**
(treatment of, with cosmetic and pharmaceutical compn. contg. saponin and sapogenin of Medicago)

IT Pharmaceutical dosage forms
(gels, saponin and sapogenin of Medicago in, for prevention of

hair loss and skin aging)

IT **Hair** preparations
(growth stimulants, saponin and sapogenin of Medicago, cosmetic and pharmaceutical compn. contg.)

IT Cosmetics
Pharmaceutical dosage forms
(liposomes, saponin and sapogenin of Medicago in, for prevention of **hair** loss and skin aging)

IT Pharmaceutical dosage forms
(lotions, saponin and sapogenin of Medicago in, for prevention of **hair** loss and skin aging)

IT Pharmaceutical dosage forms
(ointments, creams, saponin and sapogenin of Medicago in, for prevention of **hair** loss and skin aging)

IT Triterpenes and Triterpenoids
RL: BIOL (Biological study)
(saponins, of Medicago, cosmetic and pharmaceutical compn. contg., for prevention of **hair** loss and skin aging)

IT Saponins
RL: BIOL (Biological study)
(triterpenoid, of Medicago, cosmetic and pharmaceutical compn. contg., for prevention of **hair** loss and skin aging)

IT **57-83-0**, Pregn-4-ene-3,20-dione, biological studies 93-60-7, Methyl nicotinate 123-99-9, Azelaic acid, biological studies 123-99-9D, Azelaic acid, derivs. 130-95-0, Quinine 130-95-0D, Quinine, derivs. 427-51-0, Cyproteron acetate 1406-18-4, Vitamin E 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 7782-49-2, Selenium, biological studies 9081-34-9 11103-57-4, Vitamin A 12001-76-2, Vitamin B **38304-91-5**, Minoxidil 73671-86-0 127278-53-9 145808-46-4
RL: BIOL (Biological study)
(cosmetic and pharmaceutical compn. contg. saponin or sapogenin from Medicago and)

IT 465-99-6, Hederagenin 508-01-0 595-14-2 595-15-3 599-07-5, Medicagenic acid 6750-59-0 6989-24-8, Bayogenin 56283-67-1, Lucernic acid 84161-89-7, Zanhic acid
RL: BIOL (Biological study)
(of Medicago, cosmetic and pharmaceutical compn. contg., for prevention of **hair** loss and skin aging)

L5 ANSWER 2 OF 4 USPATFULL

ACCESSION NUMBER:	1999:48233 USPATFULL
TITLE:	Method for treating viral infections
INVENTOR(S):	Ben-Hur, Ehud, New York, NY, United States Malik, Zvi, Emek Hefer, Israel
PATENT ASSIGNEE(S):	New York Blood Center, Inc., New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5895786		19990420
APPLICATION INFO.:	US 1996-646548		19960508 (8)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Huang, Evelyn
LEGAL REPRESENTATIVE:	Amster, Rothstein & Ebenstein
NUMBER OF CLAIMS:	6
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT:	445

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM **Photodynamic therapy** mediated by ALA was proposed in 1990 as a new cancer treatment (Kennedy, J. C., et al., J. Photochem. Photobiol. B:Biol. 6:143-148 (1990)). **Topical** application of ALA followed by exposure to light has been used successfully for eradication of various skin cancers in clinical. . .

DETD ALA may be administered by conventional modes of administration such as oral, **topical**, or parenteral administration. The mode of administration will generally depend upon whether the viral infection is systemic or localized. If. . .

DETD For oral, **topical**, or parenteral administration, ALA may be combined with a pharmaceutically acceptable carrier which is "acceptable" in the sense of being.. . .

DETD . . . as lactose, mannitol, corn starch or potato starch; with binders such as crystalline cellulose, cellulose derivatives, acacia, corn starch or **gelatins**; with disintegrators such as corn starch, potato starch or sodium carboxymethyl-cellulose; and with lubricants such as talc or magnesium stearate.

DETD For **topical** administration, ALA may be combined with **creams**, **gels**, oils and the like. Skin **penetration enhancers** such as dimethylsulfoxide (DMSO), propylene glycol,' polyethylene glycol, isopropanol, ethanol, oleic acid, N-methylpyrrolidone, and the like, which increase the permeability. . . with a polymeric substance such as ethylcellulose, hydroxypropyl cellulose, ethylene/vinylacetate, polyvinyl pyrrolidone, and the like, to provide the composition in **gel** form, which can be dissolved in solvent such as methylene chloride, evaporated to the desired viscosity, and then applied to. . .

DETD . . . to proliferate by 5 .mu.g/ml phytohemagglutinin (PHA) at 37.degree. C. at 5% CO.sub.2. The cells were used for photodynamic treatment (**PDT**) experiments after 3 days in culture.

DETD XTT assay. Cellular growth or survival after **PDT** was determined. 2-3 bis[2-methoxy-4-nitrosulfophenyl]-5-[(phenyl-amino)carbomyl]-2-H-tetrasodium hydroxide (XTT) (Sigma Chemical Co.) was prepared at 1 mg/ml in prewarmed (37.degree. C.) medium without. . .

DETD . . . hours after ALA administration. For human clinical experiments, 20% of ALA, 2% DMSO and 2% EDTA disodium salt in base **cream** was applied to the lesion (0.2 ml ALA **cream** per 1 cm.sup.2 of skin area) after cleaning the area with saline solution. After the ALA **cream** application, the skin was covered by a plastic adhesive dressing and an aluminum foil shield for protection from light exposure. The **cream** was left on the skin 4-5 hours. Prior to light exposure the ALA **cream** was removed.

DETD In order for ALA-**PDT** to be effective, ALA concentration and time of incubation was optimized to obtain maximal accumulation of PP in the cells.. . .

DETD The generality of this phenomenon was established for other viruses

harbored in lymphoblastoid cells. FIG. 3 shows that ALA-**PDT** reduced survival of Raji cells infected with a C-type retrovirus and VZV to about 25% of control cells not treated. . . observed with ALA in the dark. The uninfected cells were not affected in the dark and only moderately affected by ALA-**PDT**. The effects of ALA-**PDT** on P3HR1 cells infected with EBV and on CEM cells infected with HSV are shown in FIG. 4. Dramatic destruction. . .

DETD . . . light or ALA only at various times after infection had no significant effect on the clinical manifestations. When treated with ALA-**PDT** immediately or up to 6 hours after infection there was a dramatic effect. Duration of vesicles' appearance was very short. . . cm in the controls. The crusts remained for about a month and the irradiated area remained hairless for 6 weeks. ALA-**PDT** administered 24 hours or longer after infection had no effect on the manifested signs.

DETD . . . after infection (FIG. 6). However, when ALA administration was followed by 120 J/cm.sup.2 light exposure no HSV could be isolated. ALA-**PDT** 2 days after infection had only a small effect on the HSV titer (FIG. 7).

DETD . . . 1. A patient who underwent kidney transplant 15 years ago exhibited massive Verrucae vulgares of the hands. ALA (20%) in **cream** supplemented with EDTA and DMSO was applied, and the area was exposed to red light 4 hours later (120 J/cm.sup.2).. . .

CLM What is claimed is:

. . . skin infection in a subject comprising topically applying to the skin infection of the subject in need there of a **topical** pharmaceutical composition comprising 5-aminolevulinic acid and an iron chelating agent in amounts effective to cause virus-infected skin cells to accumulate. . .

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